



UNITED STATES PATENT AND TRADEMARK OFFICE

W  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/818,783	03/28/2001	Akira Noda	0445-0295P	1034

2292 7590 02/24/2003

BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

EXAMINER

ANDERSON, CATHARINE L

ART UNIT

PAPER NUMBER

3761

DATE MAILED: 02/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

MF

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/818,783	NODA ET AL.
	Examiner	Art Unit
	C. Lynne Anderson	3761

-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 27 November 2002.

2a) This action is FINAL.                  2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-5,7-11 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-5 and 7-11 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) Z	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tao et al. (WO 99/60973).

Tao discloses all aspects of the claimed invention, but remains silent as to the L\* and C\* values of the printed area, and the light transmittance of the nonwoven material. Tao discloses an absorbent article, as shown in figure 10, comprising a liquid-permeable topsheet 54, an absorbent core 66, and a liquid-impermeable backsheet 52. The backsheet 52 is constructed from a breathable film material, as disclosed on page 5, lines 22-27. The film is printed with a multicolored graphic pattern, as disclosed on page 6, lines 21-28. A nonwoven material is laminated to the outer side of the film, as disclosed on page 9, lines 9-12. Tao discloses performing color difference tests on his backsheet film material, determining the preferred b\* value for the material is between 0.0 and 0.5, making the material white or very close to it.

Tao does not disclose performing color difference tests on the printed area of the backsheet 52. Tao does, however, disclose using bright colors, such as royal blue, sky blue, and dark blue, in the printed area of the backsheet 52, as described on page 6, lines 21-26. These colors represent a wide range of shades ranging from light to dark,

with royal blue clearly being neither very light nor very dark. The L\* value is a measure of the darkness of a color, with 100 being so light it is white, and 0 being so dark it is black. Royal blue, being neither very light nor very dark, inherently lies somewhere near the center of the range, and therefore would fall into the range for the L\* value disclosed in the instant claim 1.

The graphics disclosed by Tao in figure 10 are designed to be highly visible and clear. They inherently have chroma, though Tao remains silent as to the C\* value giving a quantitative measure to the chroma. To produce a clear and visible graphic, printing colors with a high degree of quality, or chroma, is desired. It would be obvious to one of ordinary skill in the art at the time of invention to print the graphics with a C\* value of between 20 and 120, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Tao discloses printing designs on the backsheet of a diaper that are visible through the nonwoven material laminated to the backsheet. It is well-known that a nonwoven material that does not allow suitable light transmittance will hinder both the visibility of the printed designs and the breathability of the backsheet. Though Tao remains silent as to the value of the light transmittance, the nonwoven material disclosed by Tao inherently has a light transmittance value, and the light transmittance of the nonwoven material must be sufficient to allow the designs printed on the backsheet 52 to be visible. It would be obvious to one of ordinary skill in the art at the time of invention to construct a nonwoven material with a light transmittance of 40 to

83%, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Claims 2, 3, 5, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tao et al. (WO 99/60973) as applied to claims 1 and 4 above, in view of Morman et al. (5,883,028).

Tao discloses all aspects of the claimed invention, but remains silent as to the basis weight of the nonwoven material used in the backsheet.

Tao discloses laminating a nonwoven material to a breathable film material with a basis weight of 20 to 40 g/m<sup>2</sup>, as described on page 8, lines 4-9. Tao, however, remains silent as to the basis weight of the nonwoven material itself.

Morman discloses a material for use as a diaper backsheet 40 comprising a breathable film 32 with a nonwoven material 12 laminated to its outer side, as described in column 1, lines 5-8, and column 9, lines 25-33. Morman discloses a basis weight of the nonwoven material, the necked web, as being between 15 and 50 g/m<sup>2</sup> in column 11, lines 44-46. A nonwoven material having this basis weight strengthens the film to which it is laminated without reducing the breathability of the film, as disclosed in column 11, lines 53-54. It is noted by the examiner that the reference numbers used by Morman do not appear to be consistent throughout the disclosure. Morman does, however, clearly disclose a laminate comprising a film and a necked web, the necked web having a basis weight of between 15 and 50 g/m<sup>2</sup>.

It would therefore be obvious to one of ordinary skill in the art at the time of invention to construct the nonwoven material of Tao with a basis weight of between 15 and 50 g/m<sup>2</sup>, as taught by Morman, to provide sufficient strength without reducing breathability.

Claim 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tao et al. (WO 99/60973) in view of Morman et al. (5,883,028), as applied to claim 10 above, and further in view of McCormack et al. (WO 00/38915).

Tao discloses all aspects of the claimed invention with the exception of a b\* value less than 0 and greater than -0.5.

Tao discloses on page 5, lines 12-13, that consumer acceptance for films having a yellow tint is low.

McCormack discloses a film laminate for use as a backsheet of an absorbent article, as described on page 1, lines 4-5 and 9-10. The film has a b\* value of -0.2, as disclosed on page 22, lines 27-29, which results in a significantly reduced yellow tint.

It would therefore be obvious to one of ordinary skill in the art at the time of invention to construct the backsheet of Tao such that it has a b\* value of -0.2, as taught by McCormack, in order to reduce the yellow appearance of the backsheet, since Tao discloses a yellow appearance is undesirable.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Lynne Anderson whose telephone number is (703) 306-5716. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (703) 308-1957. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3590 for regular communications and (703) 306-4520 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

WA  
cla  
February 24, 2003

  
WEILUN LO  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700